



**City of Havre de Grace  
Department of Public Works**

711 Pennington Avenue • Havre de Grace, MD 21078  
Phone: 410-939-1800 ext. 1130 • Fax: 410-939-7527

**As-Built Stormwater Management  
Plans Review Checklist**

**Project Name:** \_\_\_\_\_

**Tax Map** \_\_\_\_\_ **Parcel** \_\_\_\_\_ **Lot** \_\_\_\_\_ **Plat** \_\_\_\_\_ **ADC Map & Grid** \_\_\_\_\_

**Owner's Name:** \_\_\_\_\_

\_\_\_\_\_ **Address** \_\_\_\_\_ **City/Town** \_\_\_\_\_ **State** \_\_\_\_\_ **Zip Code** \_\_\_\_\_

**Engineer/Surveyor:** \_\_\_\_\_

**For additional contact:** \_\_\_\_\_

**Name:** \_\_\_\_\_

Any major change or deviation from the original plan must be redesigned and revised plans submitted to Department of Public Works, prior to the performance of the work.

**LEGEND FOR REVIEW CHECKLIST:**

- √ Accepted                      X Not Accepted                      Inc. Incomplete
- NA Not Applicable              R Required, not submitted              NC Not Checked

**SUBMITTALS/METHODS**

**A. Submittals (1<sup>st</sup> Review):**

- \_\_\_ 1. Two (2) Folded Redlined Stormwater Management plan copy sets.
- \_\_\_ 2. Two (2) Sealed Geotech Reports, and Two (2) Compaction Reports.
- \_\_\_ 3. Two (2) Sealed copies of Stormwater Management Computations. (If computations changed due to construction.)

**B. Submittals (Final Approval):**

- \_\_\_ 1. One (1) Rolled redlined Mylar set signed and sealed by both Professional Engineer in charge and Professional Geotechnical Engineer.
- \_\_\_ 2. Two (2) folded Redlined Stormwater Management plan copy sets.
- \_\_\_ 3. One (1) CD of Scanned Redlined Stormwater Management Plans. PDF format with a minimum of three NAD 83m x, y.
- \_\_\_ 4. One (1) CD of scanned, signed and sealed Stormwater Management Computations. PDF format (if computations changed due to construction.)

C. Method:

- \_\_\_ 1. The minimum information shall be shown in Red on the print copy and final mylar with “As-Built” in the lower right corner or each sheet.
- \_\_\_ 2. A check mark (✓) may be made beside planned values if they were actually constructed values. For changed values, line out the planned value and enter the actual value.
- \_\_\_ 3. Elevations to the nearest 0.1’ are sufficient.
- \_\_\_ 4. There must be the proper relation between the elevations of the principal spillway crest, the emergency/token spillway crest, and the top of the dam. All of these elevations should meet SCS-MD378 criteria.

D. Minimum Information Required:

- \_\_\_ 1. A signed certification statement and seal by a Professional Engineer.
- \_\_\_ 2. A signed certifications statement and seal by a Geotechnical
- \_\_\_ 3. Plan View:
  - \_\_\_ a. Show the length, width, and depth, or contours of the pool area in Red so that As-Built volume can be verified.
  - \_\_\_ b. Trees, shrubs, other woody vegetation – show in Green, not allowed within 15 feet of any portion of the embankment.
  - \_\_\_ c. A minimum of three (3) NAD 83m x, y coordinates.
- \_\_\_ 4. Profile along Centerline of Dam
  - \_\_\_ a. Profile the top of Dam – elevation at stations (the top of fill elevation plus the allowance for settlement.)
  - \_\_\_ b. Approximate original ground line
  - \_\_\_ c. Top of impervious core embankment (10 Year DHW minimum, Unified Soil Classification GC, SC, CH, or CL). Compaction meets SCS-MD378 specifications.
  - \_\_\_ d. Approximate bottom of cut off trench (4 feet minimum or deeper if required, Unified Soil Classifications GC, SC, CH, or CL). Compaction meets SCS-MD378 Specifications.
  - \_\_\_ e. Principal spillway location (station and elevation)
  - \_\_\_ f. Emergency or token spillway – location, bottom, width and side slopes (in undisturbed earth only.)
- \_\_\_ 5. Profile – Principal Spillway
  - \_\_\_ a. Top of dam width and side slopes – must be equal to or flatter than design
  - \_\_\_ b. Emergency or token spillway crest elevation
  - \_\_\_ c. Top of impervious core embankment (10 year DHW minimum)
  - \_\_\_ d. Cut-off trench bottom width, slopes, depth
  - \_\_\_ e. High water elevations (As-Built) WQv, CPv, 2,10, and Ultimate 100 year storms
  - \_\_\_ f. Riser (Reinforced concrete or metal) – Size, type, riser crest elevation, corrugation size, gauge
  - \_\_\_ g. Low flow stage orifice – size, material, invert elevation

- \_\_\_h. Low flow stage trash rack – size, material, dimensions
  - \_\_\_i. Low flow stage drain pipe – size, type, length, invert elevation, corrugation size, gauge
  - \_\_\_j. Barrel (Reinforced concrete or metal) – size, corrugation size, gauge, invert elevations, length, concrete pipe classification.
  - \_\_\_k. Concrete bedding
  - \_\_\_l. Phreatic Line (from 10 year DHW minimum)
  - \_\_\_m. Sand Diaphragm or Anti-seep collars – size, spacing, material
  - \_\_\_n. Outfall – type, material, size, dimensions, filter cloth
- \_\_\_6. Profile – Emergency or Token Spillway
- \_\_\_a. Twenty-five (25) feet minimum level section and elevation
  - \_\_\_b. Slope protection – type, material, size, dimensions, filter cloth
  - \_\_\_c. Slope of exit section – may be 1-2% steeper, but no flatter than the design and no narrower than the design.
- \_\_\_7. Section – Emergency or Token Spillway (may be shown on Dam profiles)
- \_\_\_a. Width of level Section
  - \_\_\_b. Dimensions, side slopes, material size
- \_\_\_8. Sand Diaphragm and Anti-Seep Collars
- \_\_\_a. Type, material, dimensions
  - \_\_\_b. Detail and Construction Specifications
- \_\_\_9. Anti-Vortex and Trash Rack Device
- \_\_\_a. Size, type, material and its elevations in relation to the principal spillway riser crest, corrugation size, gauge, dimensions
  - \_\_\_b. Detailed construction specifications
  - \_\_\_c. Detail
- \_\_\_10. Infiltration and sand filter BMP's
- \_\_\_a. Type, dimensions, filter material, filter cloth, pipe, detail
- \_\_\_11. Elevation/Storage Chart with design elevations and volumes with As-Built elevations and volumes for comparison.
- \_\_\_12. Notice of Completion Form filled out, signed, sealed by Engineer.
- \_\_\_13. Submit photos showing the complete view of facility verifying readiness for As-Built Inspection.
- \_\_\_14. Landscaping for ESD practices
- \_\_\_15. ESD Practices
- \_\_\_a. Location of proposed practices
  - \_\_\_b. Structural details including representative cross sections for all components of the proposed drainage system or systems, and stormwater management facilities.